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CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/KRIDL/WMM/Gradation/2014-15

08.08.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements and Asphalting to HMT Layout Balance roads in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.

Reference : AEE/VP/33/2014-15 Dated: 05.08.2014

Date of Testing : 08.08.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25500**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	925	925	3.6	96.4	95-100
22.4	5210	6135	24.1	75.9	60-80
11.2	5810	11945	46.8	53.2	40-60
4.75	4255	16200	63.5	36.5	25-40
2.36	4020	20220	79.3	20.7	15-30
0.600	2510	22730	89.1	10.9	8-22
0.075	2470	25200	98.8	1.2	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97

M/s. Civil-Tech Consultants & Engineers
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Job No.: CTCE/BBMP/W.No.09/KRIDL/SDBC/Bitumen/2014-15 23.08.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP,
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to HMT Layout Balance roads in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/VP/33/2014-15 Dated: 05.08.2014
SAMPLE I/D	Asphalting to HMT Layout road in Ward No.09.
DATE OF TESTING	23.08.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474.5	474.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25.5	25.50
7. Bitumen content in %	5.10	5.10
8. Average	**5.10**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	38.26	8.06	8.06	91.94	90-100
4.75	262.3	55.28	63.34	36.66	35-51
2.36	52.15	10.99	74.33	25.67	24-39
1.18	44.23	9.32	83.65	16.35	15-30
0.3	28.54	6.01	89.67	10.33	9-19
0.075	28.13	5.93	95.60	4.40	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	32.52	6.50	6.50	93.50	90-100
4.75	241.5	48.30	54.80	45.20	35-51
2.36	91.25	18.25	73.05	26.95	24-39
1.18	53.25	10.65	83.70	16.30	15-30
0.3	30.25	6.05	89.75	10.25	9-19
0.075	28.55	5.71	95.46	4.54	3-8

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